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Clone C35

## DNA Coding Sequence

gcc gcg ATG AGC GGG GAG CCG GGG CAG ACG TCC GTA  
GCG CCC CCT CCC GAG GAG GTC GAG CCG GGC AGT  
GGG GTC CGC ATC GTG GTG GAG TAC TGT GAA CCC  
TGC GGC TTC GAG GCG ACC TAC CTG GAG CTG GCC  
AGT GCT GTG AAG GAG CAG TAT CCG GGC ATC GAG  
ATC GAG TCG CGC CTC GGG GGC ACA GGT GCC TTT  
GAG ATA GAG ATA AAT GGA CAG CTG GTG TTC TCC  
AAG CTG GAG AAT GGG GGC TTT CCC TAT GAG AAA  
GAT CTC ATT GAG GCC ATC CGA AGA GCC AGT AAT  
GGA GAA ACC CTA GAA AAG ATC ACC AAC AGC CGT  
CCT CCC TGC GTC ATC CTG TGA

FIG.1A

## Protein Sequence

MSGEPGQTSVAPPPEEVEPGSGVRIWVEYCEPCGFEATYLEL  
ASAVKEQYPGIEIESRLGGTGAFEIEINGQLVFSKLENGGFPY  
EKDLIEAIRRASNGETLEKITNSRPPCVIL\*

FIG.1B



Sheet 2 of 2  
App# No. 09/824/787 Filed April 4, 2001  
Dkt. No. 1821-0040001; Group A; Unit 1642  
Inventors: ZAUDERER et al.; Tel: 202/371-2600  
Title: Gene Gene Differentially Expressed in Breast and  
Bladder Cancer, and Encoded Polypeptides

C35 is Expressed at High Levels in Breast  
Tumors but Not Normal Tissues

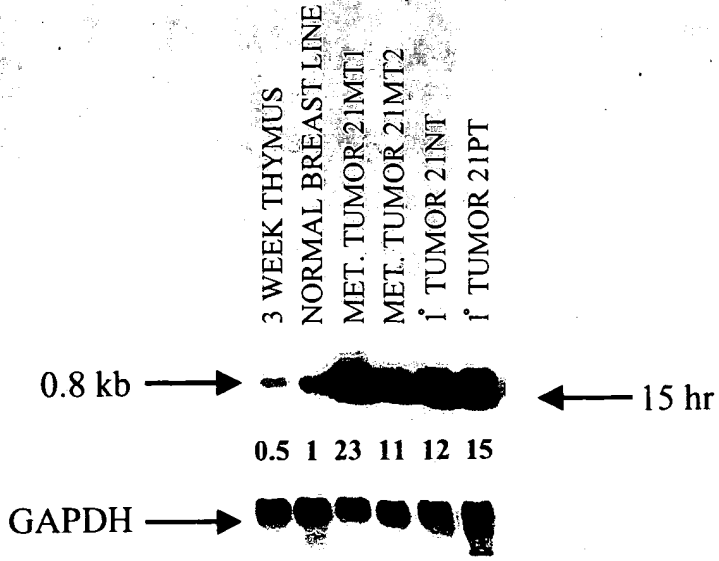


FIG.2A

C35 is Expressed at High Levels in Breast  
Tumors but Not Normal Tissues

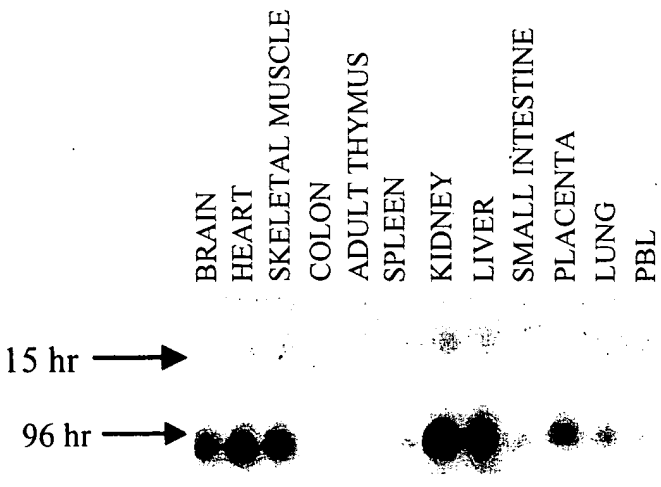


FIG.2B

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C35 is Expressed at High Levels in Breast  
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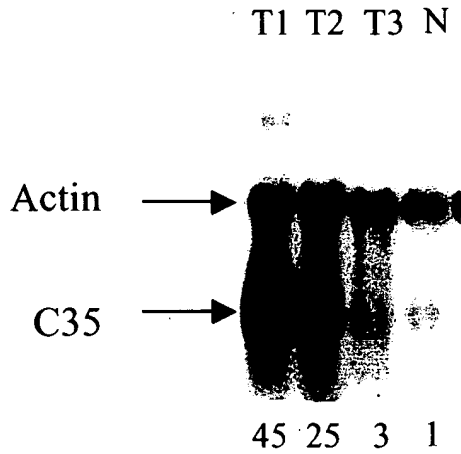


FIG.2C

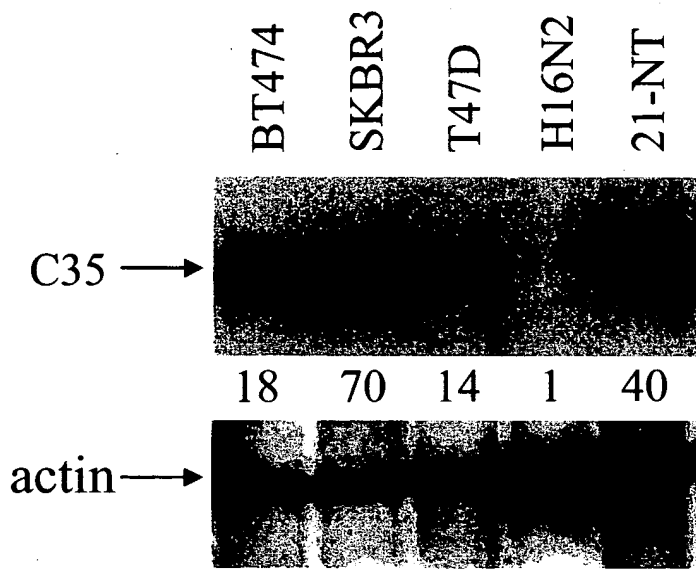


FIG.3



Sheet 5 of 28  
Appl. No. 09/824,987 Filed April 4, 2001  
Pub. No. 1821/0040001 Group A Unit 1642  
Inventors: ZAUDERER et al. Tel: 202/371-2600  
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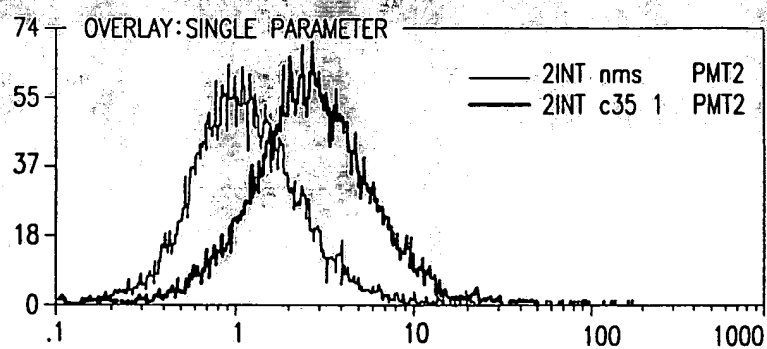


FIG.4A

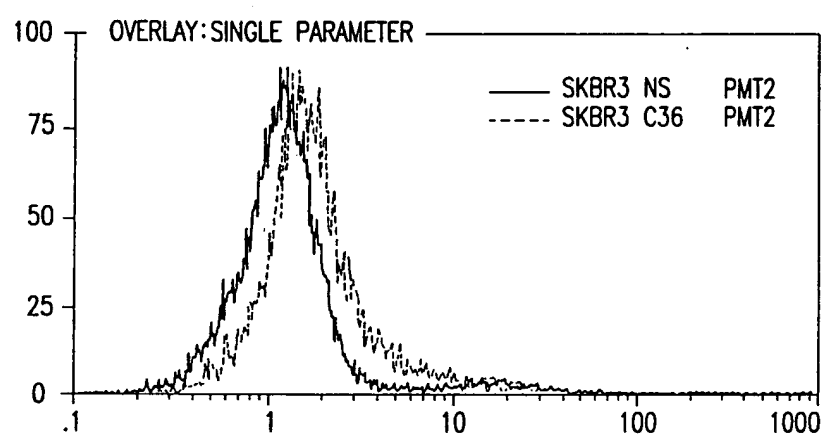


FIG.4B

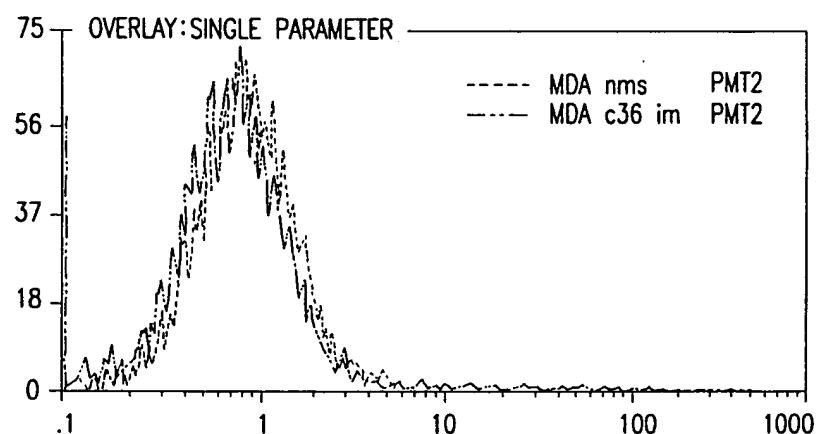


FIG.4C

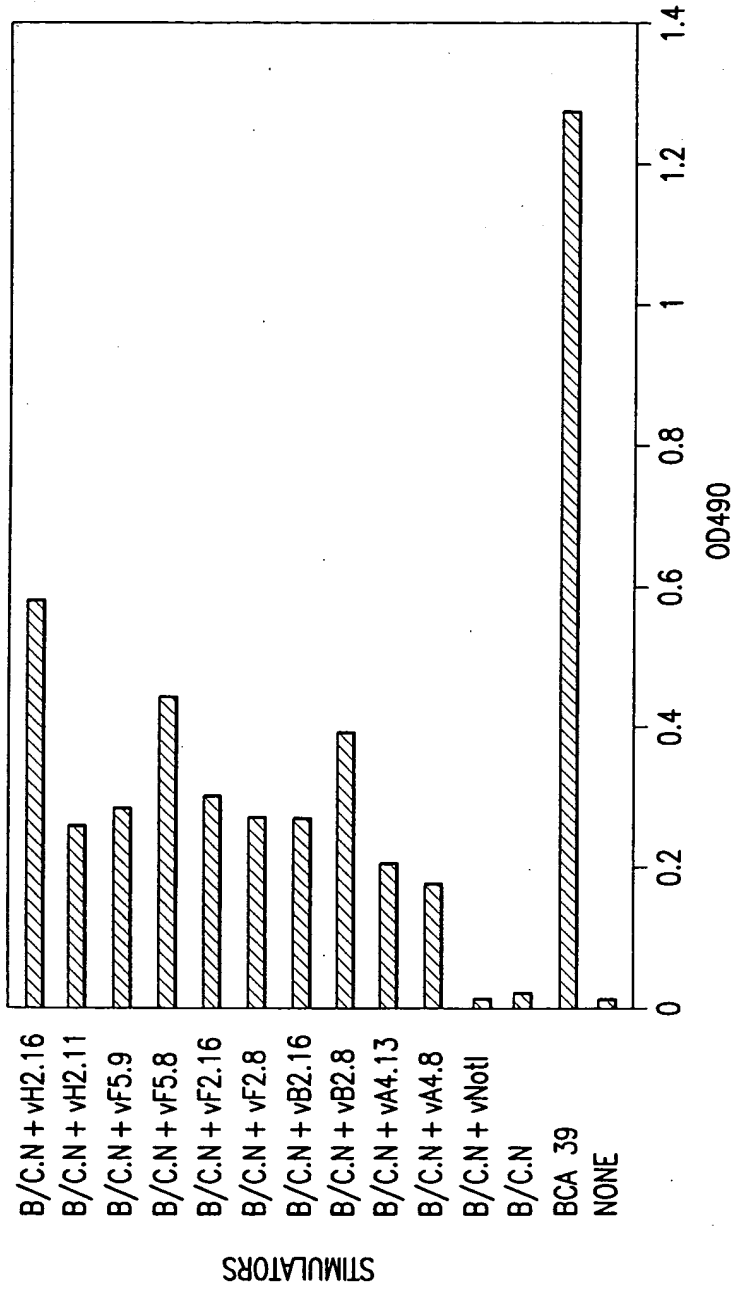


FIG.5A



TARGET	PERCENT SPECIFIC LYSIS	
	EFFECTOR : TARGET	
	10:1	2:1
BCA 34	68.4	54.8
BCA 39	36.6	23.4
B/C.N	0.2	0.3
B/C.N + vF5.8	47.5	34.6
B/C.N + vH2.16	67.8	56.2
B/C.N + VACCINIA VECTOR	0	0.2

FIG.5B

L3

Amino Acid Position	45	46	47	48	49	50	51	52	53	54	55	56
Sequence	A	F	L	G	Y	K	A	G	M	T	H	I
Nucleotide	GCC	TTT	CTG	GGT	TAC	AAG	GCT	GGC	ATG	ACC	CAC	ATC

FIG.6A

H2.16

Amino Acid Position	45	46	47	48	49	50	51	52	53	54	55	56
Sequence	A	F	L	G	Y	K	A	G	M	I	H	I
	-----T-----											

FIG.6B





<u>TARGET</u>	PERCENT SPECIFIC LYSIS	
	EFFECTOR : TARGET	
	<u>10:1</u>	<u>2:1</u>
BCA 34	62.4	32.1
BCA 39	49.7	23.6
B/C.N	3.3	0.2
B/C.N + L3 PEPTIDE 48-56 (I54)	46.0	16.1
B/C.N + L3 PEPTIDE 48-56 (T54)	2.0	0
B/C.N + L3 PEPTIDE 45-54 (I54)	0	0

FIG.7A

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Cancer, and Encoded Polypeptides

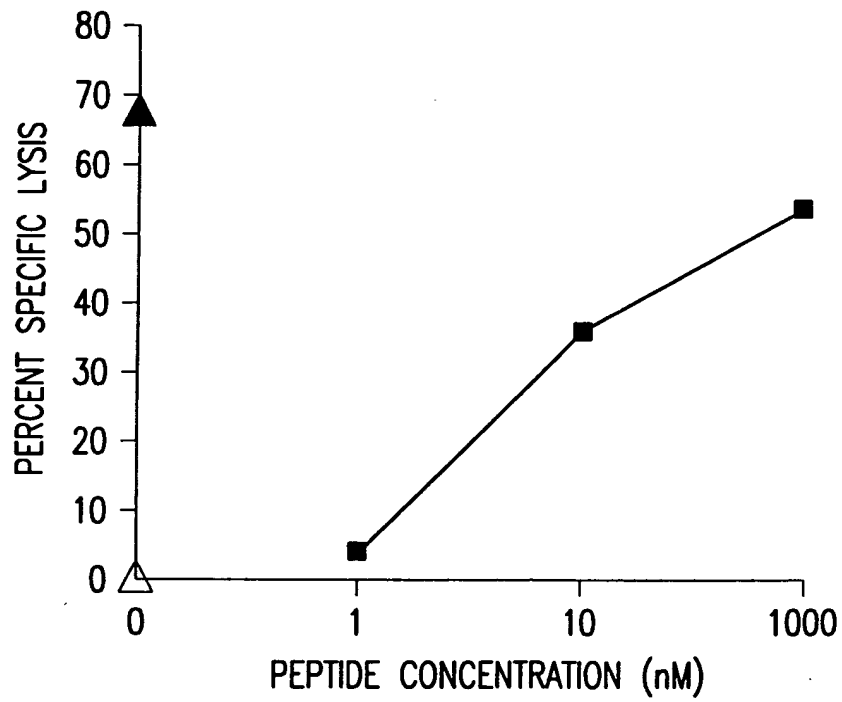
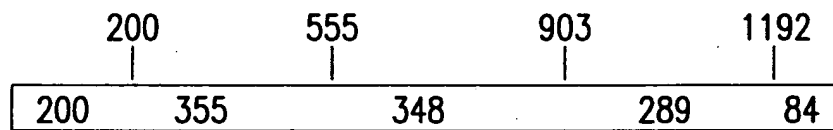


FIG.7B

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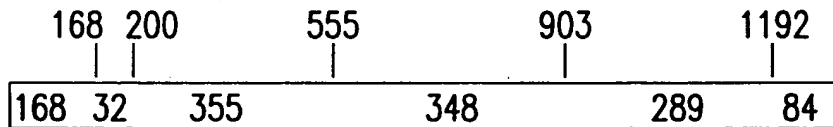


PUBLISHED L3 (1276 bp)



168-171=GACC

H2.16 (1276 bp)



168-171=GATC

FIG.8A

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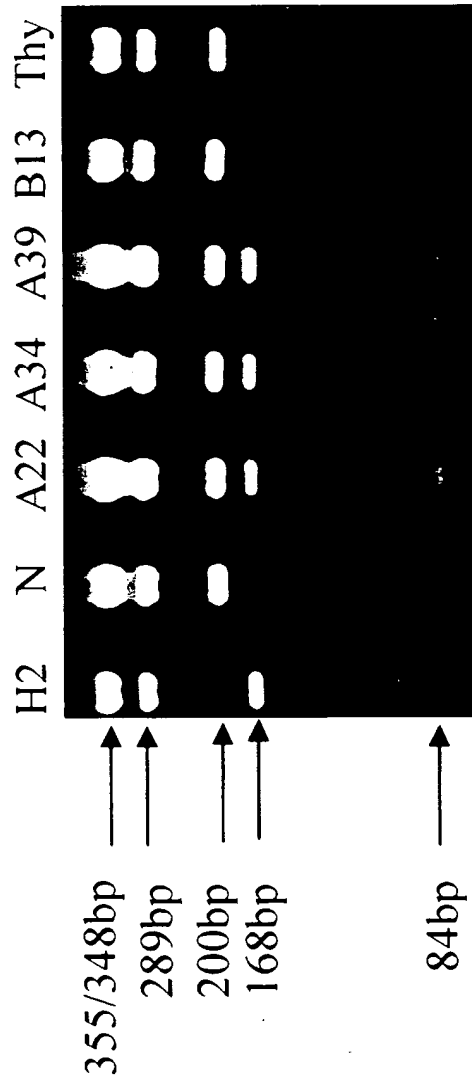


FIG. 8B

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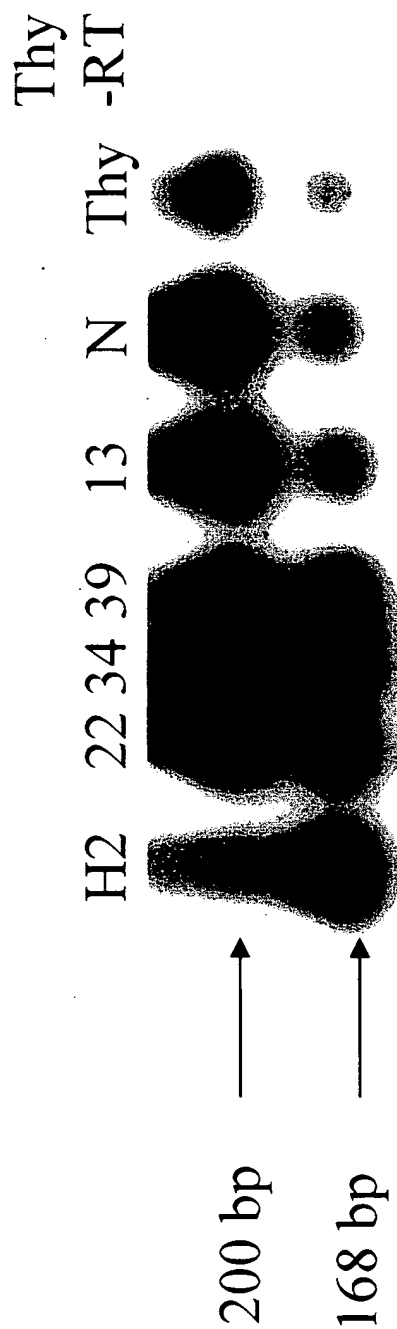


FIG.8C



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PERCENT SPECIFIC LYSIS  
 IMMUNOGEN

TARGET	vH2.16		v7.5/tk	
	40:1	10:1	40:1	10:1
BCA 34	33.6	12.9	5.7	4.0
BCA 39	22.1	9.0	5.3	3.1
B/C.N + L3 48-56 (I54)	48.2	20.2	3.9	1.5
B/C.N + L3 48-56 (T54)	6.4	1.4	1.8	2.9
B/C.N	7.1	5.7	6.1	2.8
YAC	1.2	2.5	0	1.8

FIG.9A

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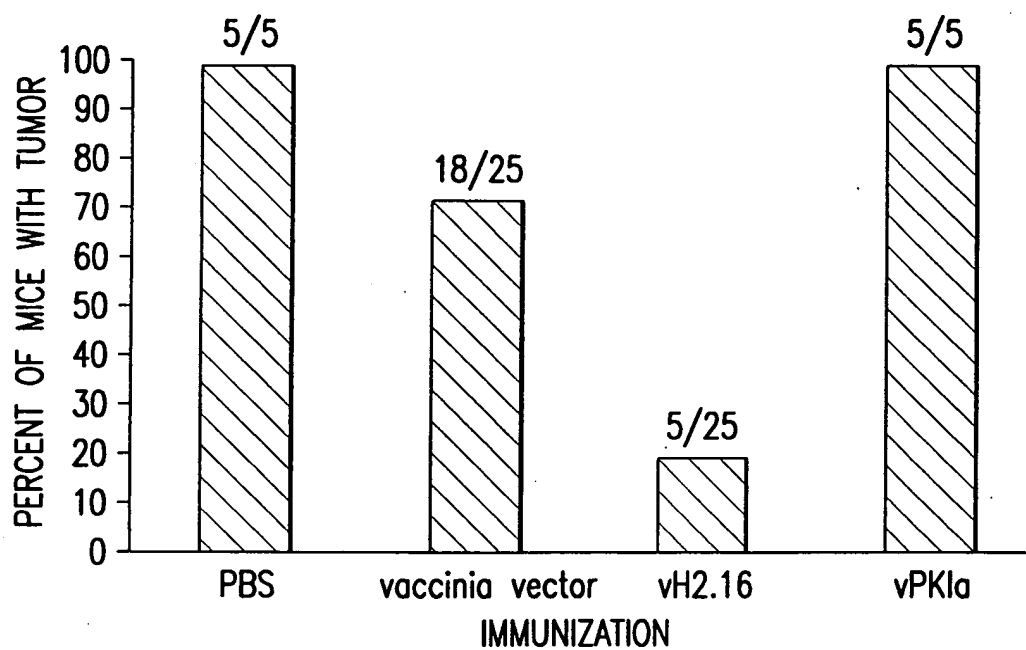


FIG.9B

Appl. No. 09/824,787; Filed: April 4, 2001  
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Inventors: ZAUDERER *et al.*; Tel: 202/371-2600  
Title: Gene Differentially Expressed in Breast and Bladder  
Cancer, and Encoded Polypeptides

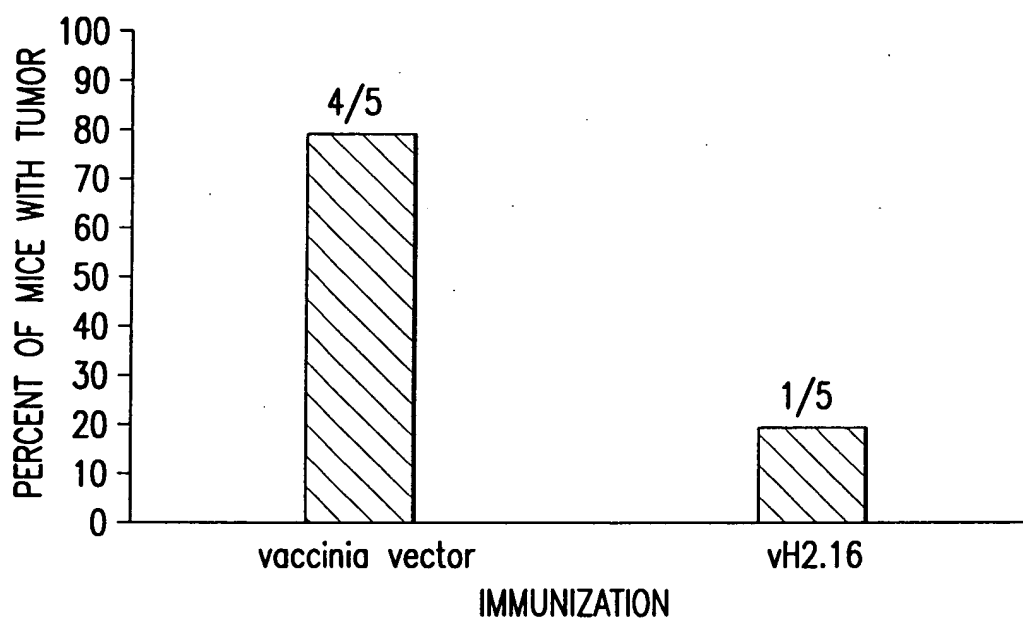
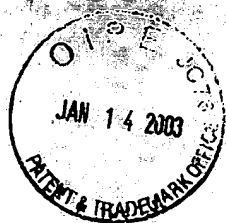


FIG.9C



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gcccgagcggagccggcccgcg ATG AGC GGG GAG CCG GGG CAG ACG TCC  
                                   M S G E P G Q T S  
 GTA GCG CCC CCT CCC GAG GAG GTC GAG CCG GGC AGT GGG GTC CGC  
 V A P P P E E V E P G S G V R  
  
 ATC GTG GTG GAG TAC TGT GAA CCC TGC GGC TTC GAG GCG ACC TAC  
 I V V E Y C E P C G F E A T Y  
  
 CTG GAG CTG GCC AGT GCT GTG AAG GAG CAG TAT CCG GGC ATC GAG  
 L E L A S A V K E Q Y P G I E  
  
 ATC GAG TCG CGC CTC GGG GGC ACA GGT GCC TTT GAG ATA GAG ATA  
 I E S R L G G T G A F E I E I  
  
 AAT GGA CAG CTG GTG TTC TCC AAG CTG GAG AAT GGG GGC TTT CCC  
 N G Q L V F S K L E N G G F P  
  
 TAT GAG AAA GAT CTC ATT GAG GCC ATC CGA AGA GCC AGT AAT GGA  
 Y E K D L I E A I R R A S N G  
  
 GAA ACC CTA GAA AAG ATC ACC AAC AGC CGT CCT CCC TGC GTC ATC  
 E T L E K I T N S R P P C V I

CTG TGA ctgcacaggactctgggttctctgctctgttctggggtccaaaccttggctc  
L \*

ccctttggctcctgctgggagctccccctgctcttttcccctacttagctccttagcaaa  
 gagaccttgacctccacttttggcctttgggtacaaagaagggaatagaagattccgtggc  
 ctgggggcaggagagagacacttccatgaacacttctccagccacctctatccccct  
 ccagggttaagtgccacgaagcccagtcactcttcgcctcggttaatacctgtctga  
 tgcacagattttattttctcccttaaccagggaatgtcagctatgggcagtaaa  
 gtggcgctac-polyA

FIG.10A

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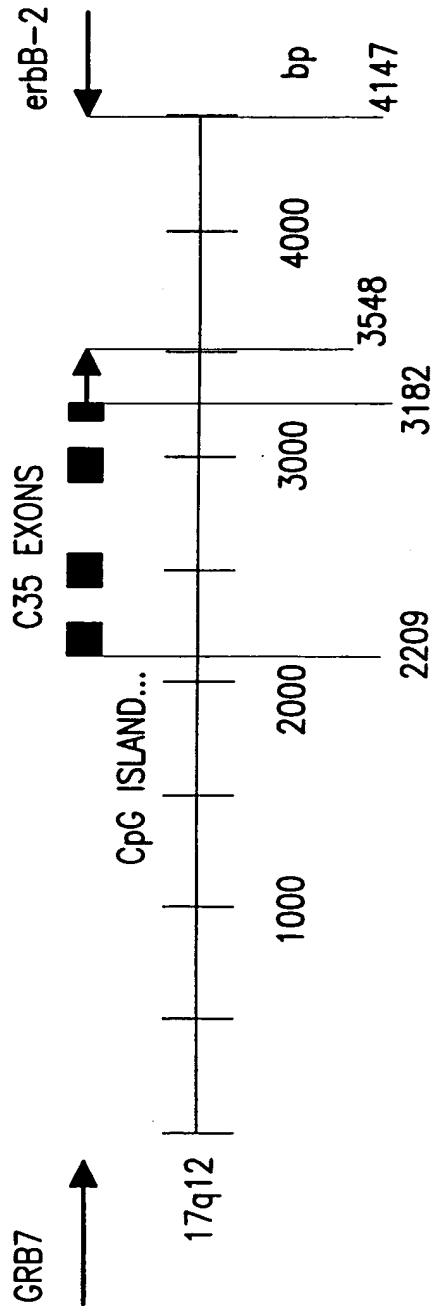


FIG.10B

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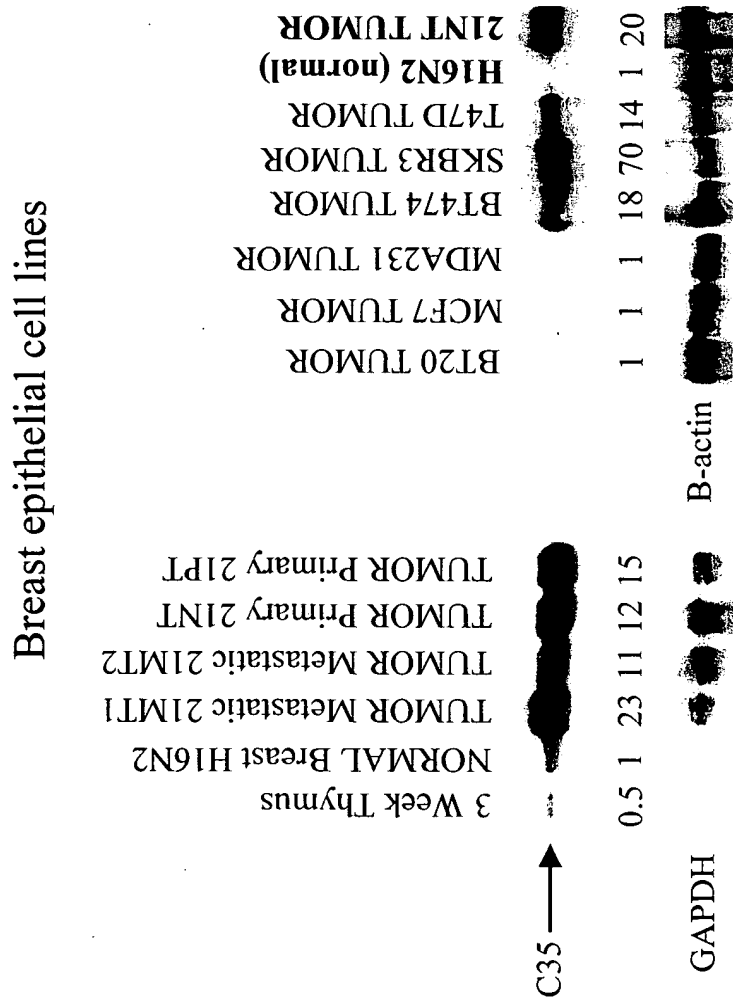


FIG. 11A

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Primary breast tissue/tumors

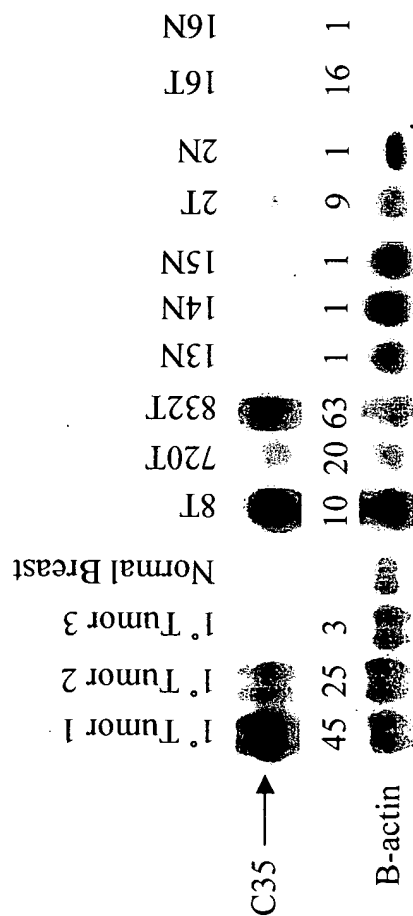


FIG. 11B

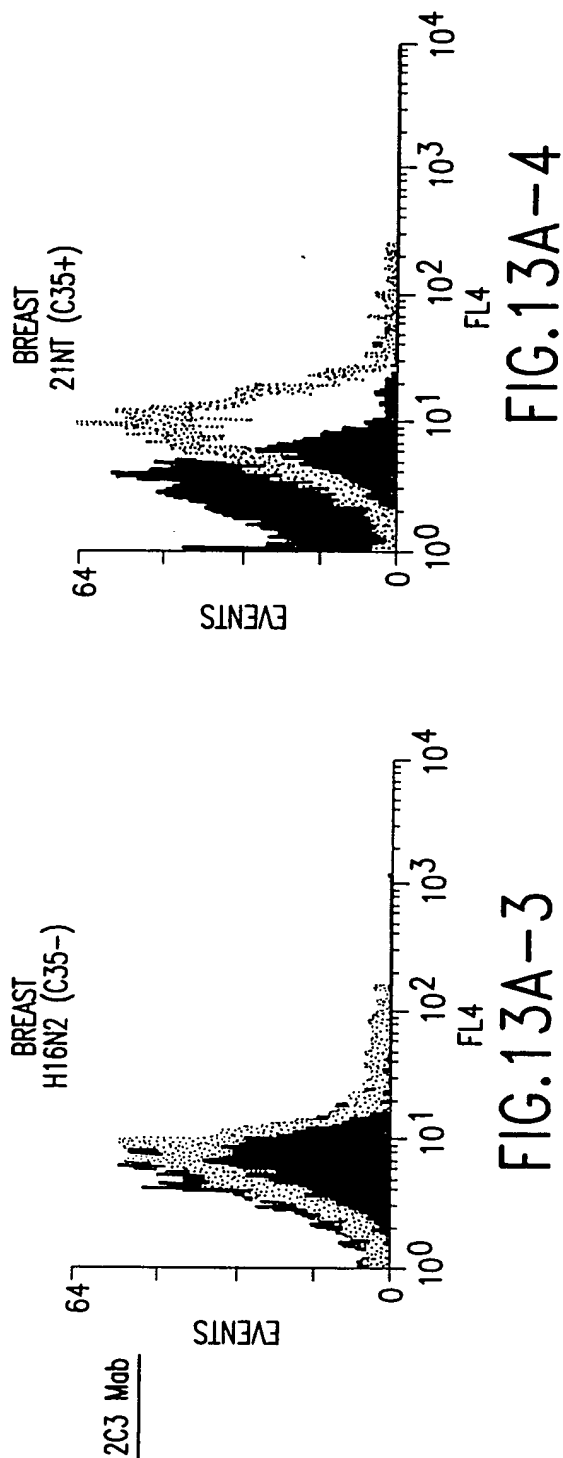
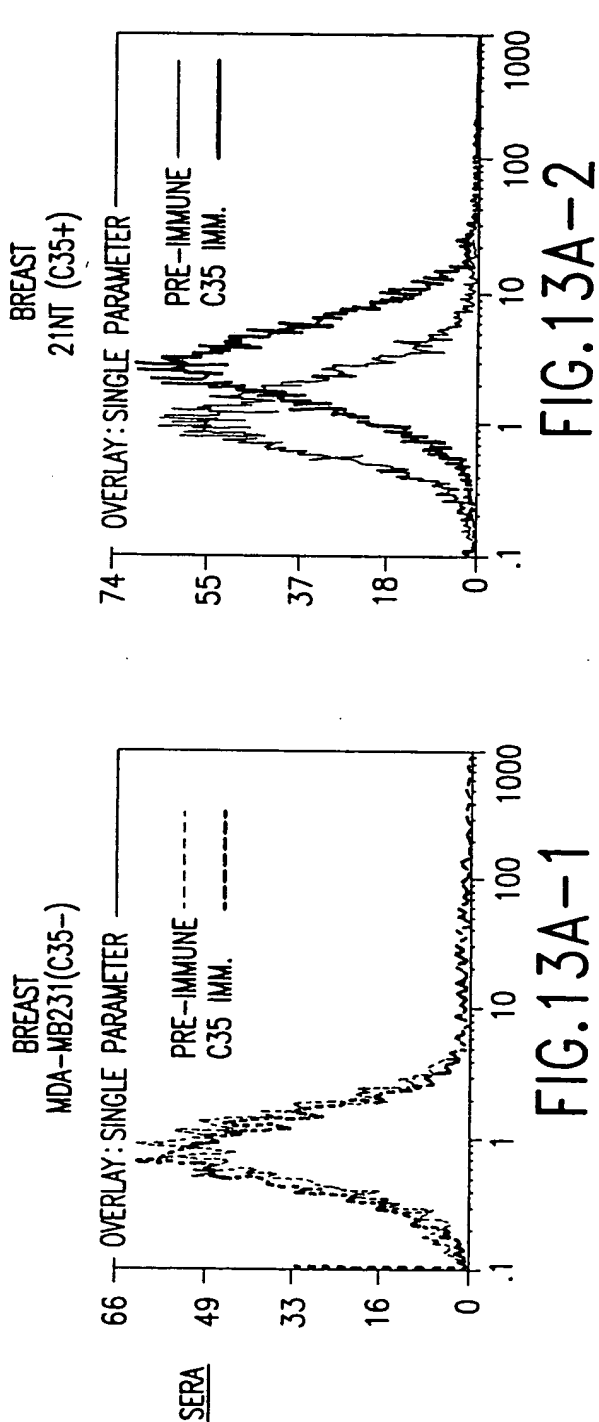
Appl. No. 09/824,787; Filed: April 4, 2001  
 Dkt. No. 1821.0040001; Group Art Unit: 1642  
 Inventors: ZAUDERER *et al.*; Tel: 202/371-2600  
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FIG.12

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 Dkt. No. 1821.0040001; Group Art Unit: 1642  
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Appl. No. 09/824,787; Filed: April 4, 2001  
 Dkt. No. 18210040001; Group/Art Unit 1642  
 Inventors: ZAUDERER *et al.*; Tel. 202/371-2600  
 Title: Gene Differentially Expressed in Breast and Bladder  
 Cancer, and Encoded Polypeptides

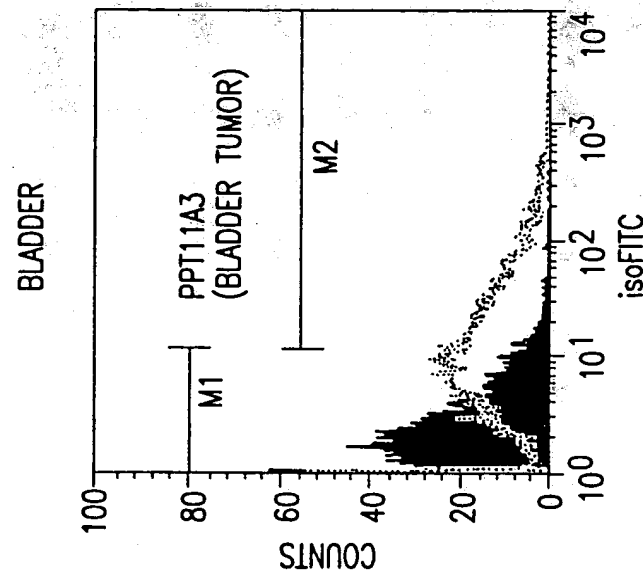


FIG. 13B-3

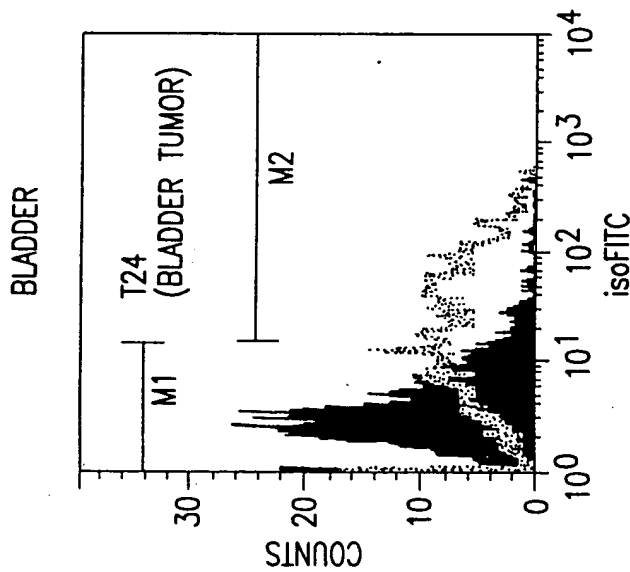


FIG. 13B-2

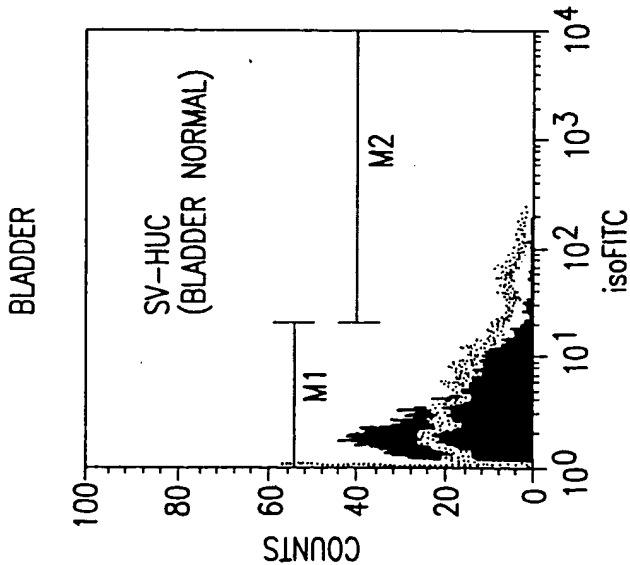


FIG. 13B-1



### 21NT BREAST TUMOR

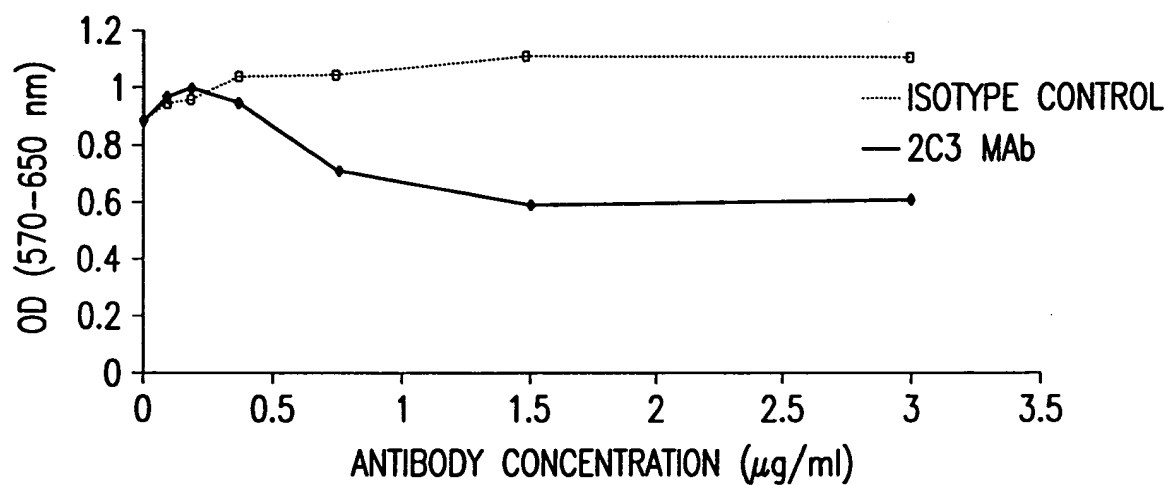


FIG.14A

### HI6N2 NORMAL BREAST

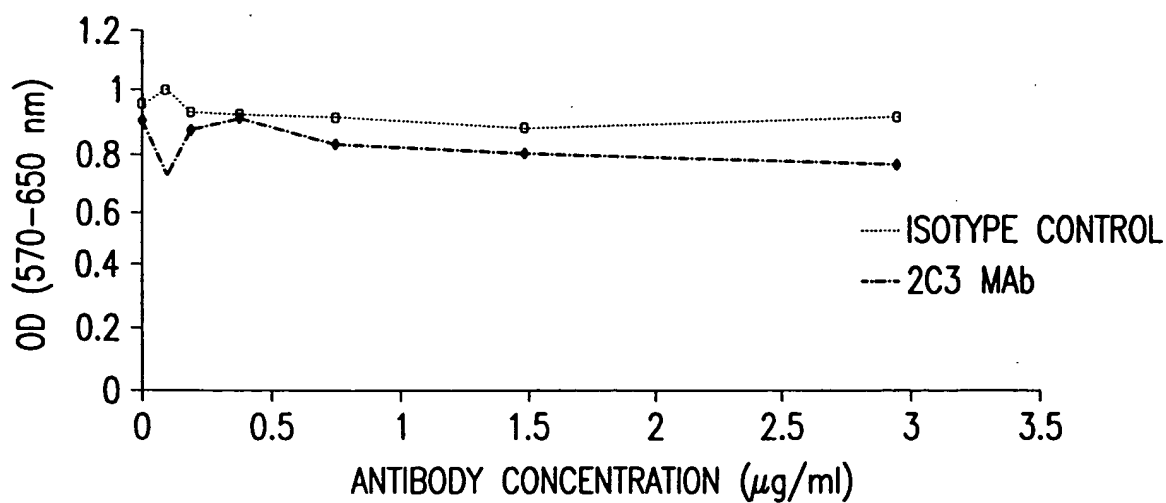


FIG.14B





### LYTIC ACTIVITY OF C35-SPECIFIC T CELL LINE 4

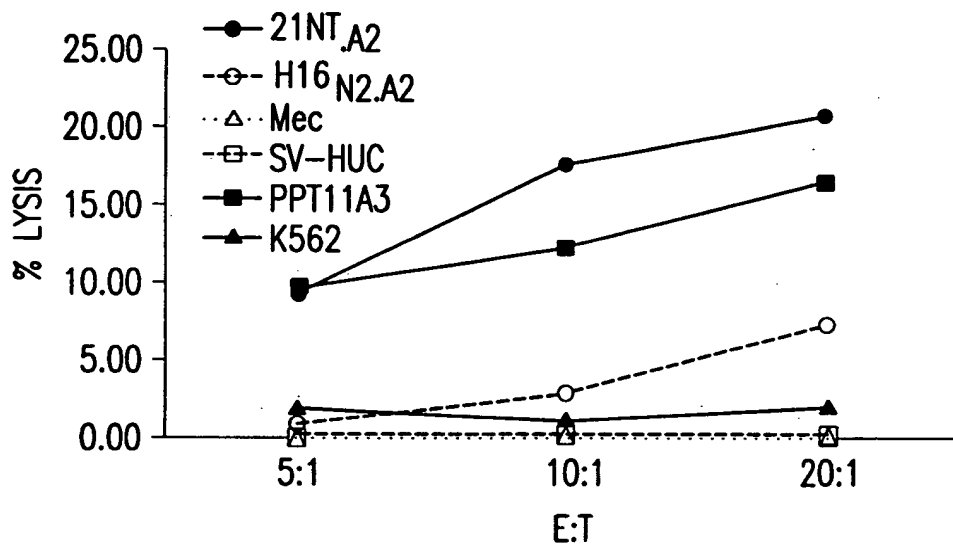


FIG.15A

### LYTIC ACTIVITY OF C35-SPECIFIC T CELL CLONE 10G3

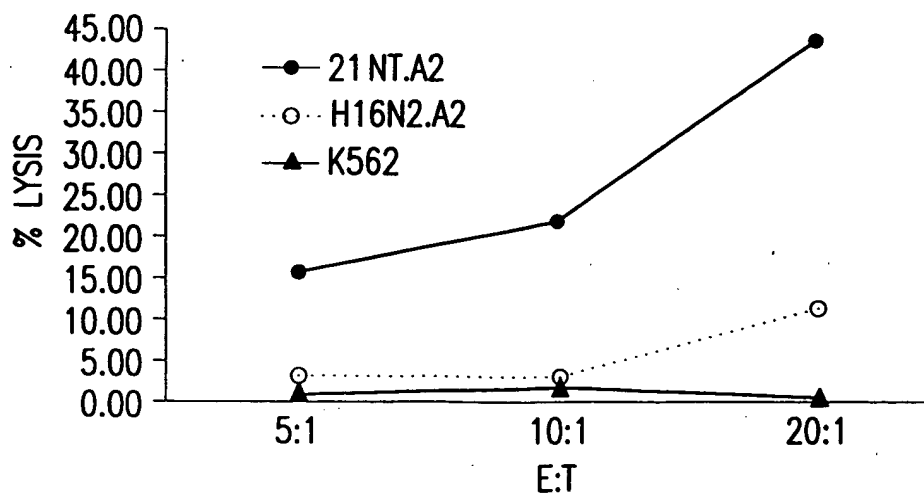


FIG.15B

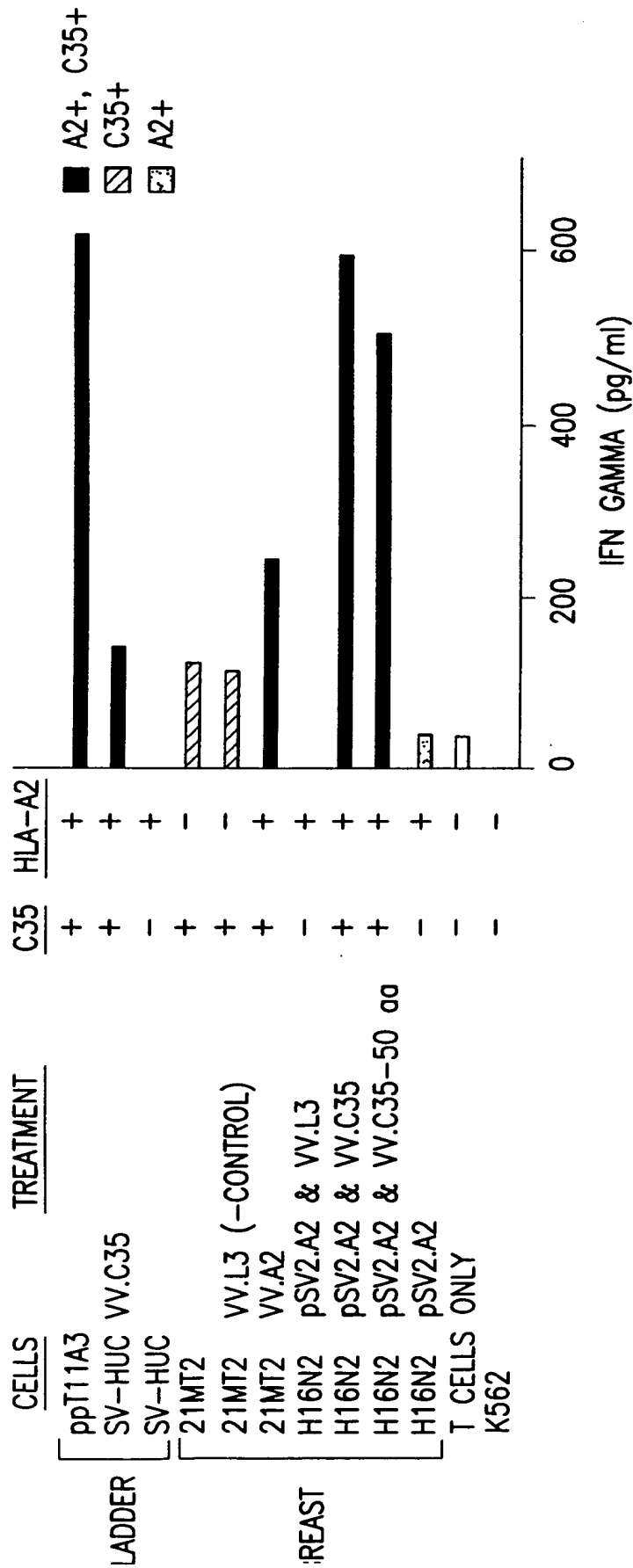


FIG.16A

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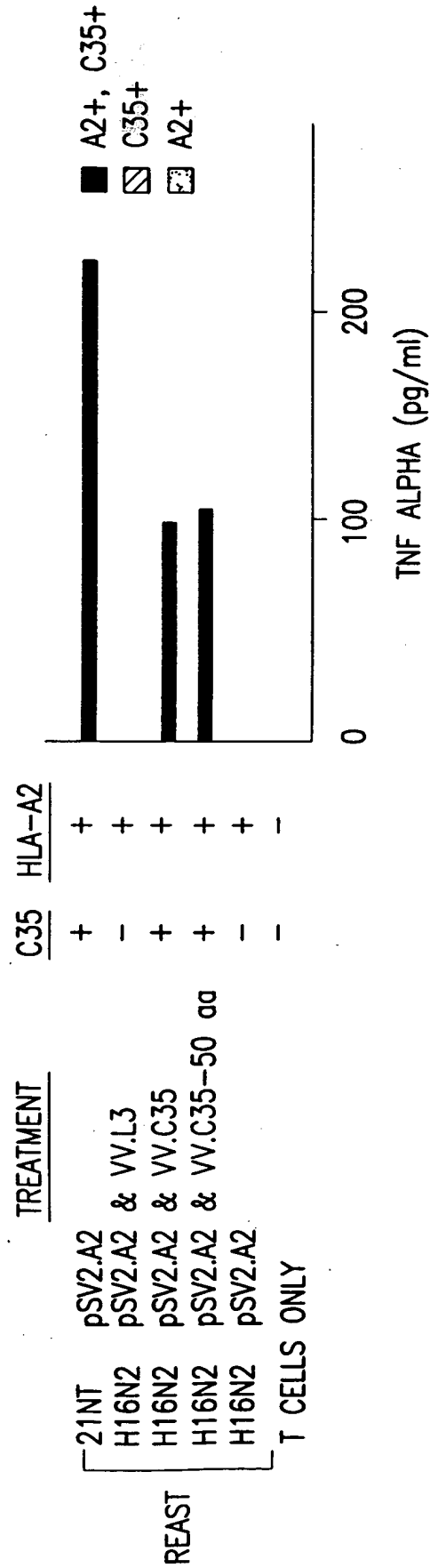


FIG.16B



# TOLERANCE TO ALLOANTIGENS INDUCED IN PRESENCE OF ANTIGENS AND ANTI-CD40 LIGAND ANTIBODY

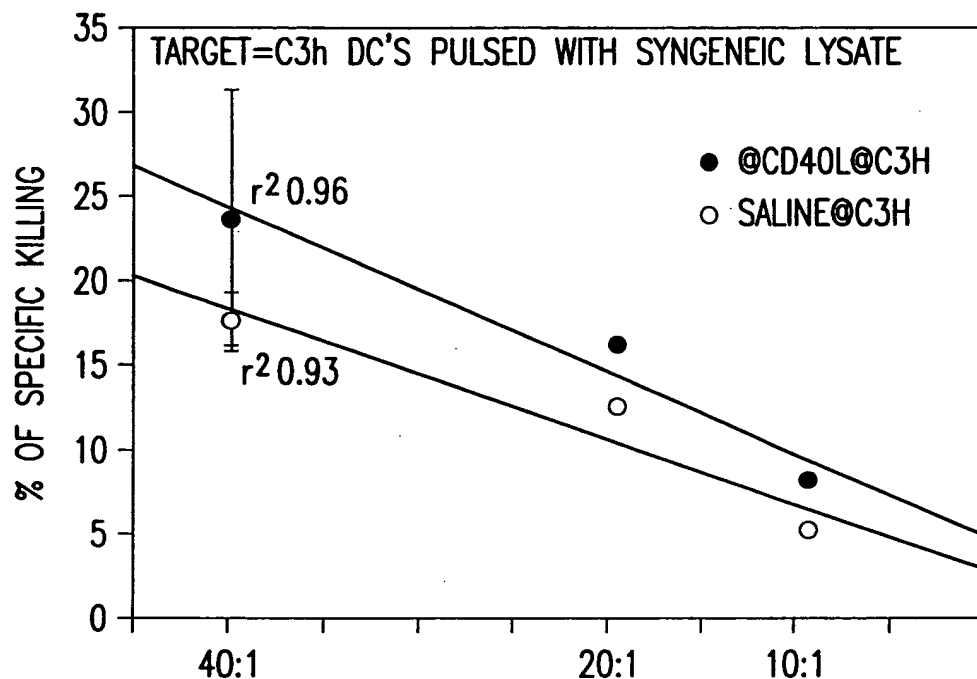


FIG.17A

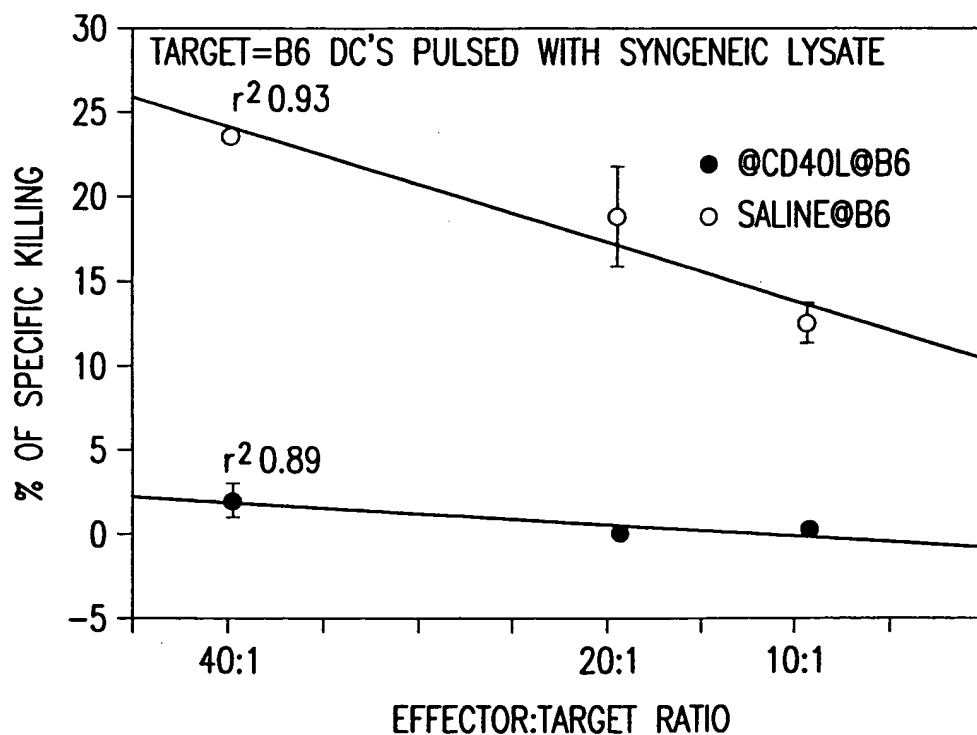


FIG 17B